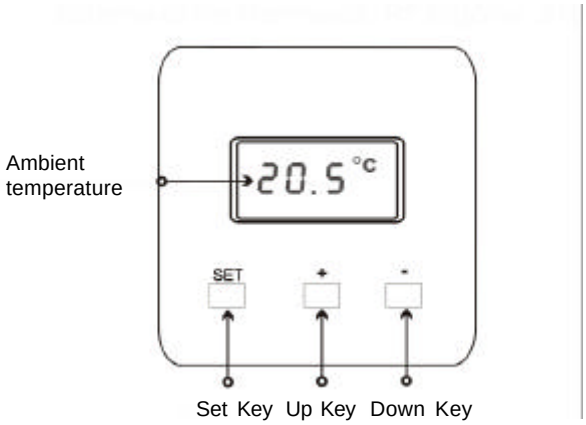
Digimax 210

Programmable Thermostat
Compatible with Maxi Controller

User Guide

Schema of the thermostat RF DigiMax 210



The RF DigiMax 210 thermostat does not need any extra wiring and works within 30 meters range. It is equiped of a secured RF code which the Maxi Controller will learn during the installation process (see §8b). This code will assure that the Maxi Controller will only answer to messages sent by your DigiMax 210. This process is described at the end of this manual.

1) To start :
Remove the battery insulation strip and check unit is functioning.

2) Operation :
The DigiMax 210 Digital Room thermostat is simple to use. The Liquid Crystal Display continuously shows ambient temperature.

To change the “Set Point” (i.e. temperature requested), press and hold the “SET” key and at the same time press “+” or “-” to select the temperature setting. The display will show the “Set Point” until the “SET” button is released. The display will then show the ambient temperature.
When the DigiMax 210 instructs your heating system to switch on, a small flame symbol appears at the bottom right of the display.

3) Installation :

DigiMax 210 Technical Data

Temperature Range :	5°C to 35°C in 1°C steps 16°C to 35°C selectable
Differential :	<1°C at 4K per Hour
Ambient temperature :	Operating 0°C to 45°C
Power Supply :	2 type AA 1.5 v alkaline cells
Battery Life :	2 years Typical
Maintenance :	no user maintenance required
RF range :	30 meters

Please read all installation instructions before proceeding.

The RF DigiMax 210 works with batteries. It does not need any wire. If you wish it to replace an old cable thermostat, isolate and secure the old wires, which are useless now. Do not forget to cut the power when you take off the old thermostat.

4) Position

The ideal position to locate the DigiMax 210 is about 1.5m above floor level, accessible, free from extremes of temperature and draught. Do not mount it on an outside wall, above a radiator or where it may be subjected to direct sunlight.

The radio link does not mean that the wiring has been simplified, but that the thermostat can be installed in any place of your house to optimate your needs in heating.

We recommend you to make the installation with the Maxi Controller before fixing your thermostat on the wall, in order to be certain of its good operation at the selected place.

5) Fixing

1. The wall plate should be positionned with a minimum of 70 mm clearance all round to allow adequate air flow
2. Fix the wall-plate directly to a flat wall
3. Remove the battery insulation strip and check unit is functioning, place it on its wall-plate

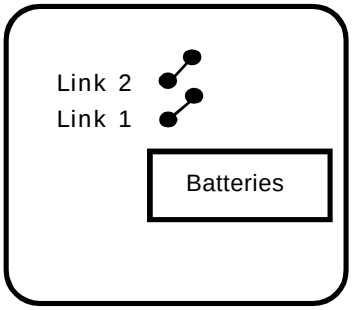
6) Configuring

The unit is supplied with a 5°C minimum temperature set point and configured as a heating thermostat as factory defaults. Two internal links can be used to reconfigure these defaults.

1. Open the unit by slackening the retaining screw situated in the bottom edge and hinging carefully upwards. Disengage the unit from the wall-plate and place it to one side for safe keeping. Take off the batteries.

2. Locate and identify the two option Links 1 and 2. Use a pair of small wire cutters to cut the appropriate links to give the required configuration.
3. Cutting Link 1 will give a minimum temperature set point of 16°C (factory default is 5°C) : in that case, the minimum T° you can set is 16°C. Cut link 2 to display cooling symbol instead of heating symbol.
4. Replace batteries being sure to observe the correct polarities. Re-fit to plastic base and tighten retaining screw. Check unit is functioning as required.

RF DigiMax 210 Rear View



Cut **Link 1** for 16°C minimum set point
Cut **Link 2** to display cooling symbol instead of heating symbol

7) Battery replacement

A “flashing” battery low symbol will appear at the bottom left of the display when the batteries start to approach the end of their life. This indicates that they should be replaced within the next month. Ultimately, the display will start flashing and the thermostat will shut down until the batteries are replaced.

To replace the batteries, the following procedure should be carried out.

1. Slacken the retaining screw on the unit and open by hinging upwards the top edge.
2. Remove batteries and fit two new “AA” alkaline cells taking care to observe the correct battery polarities. Check unit is functioning
3. Re-fit it to the plastic base and check that the RF link still operates. This can be easily done by adjusting the requested temperature under or over the level of the ambient temperature, in order to activate and disactivate several times the boiler.

8) Connection to the the Maxi Controller

a) General operation

You can connect up to 4 DigiMax 210 to the Maxi Controller. Depending on the information sent by the thermostats, the Maxi Controller will send X10 messages on the power line to turn On or Off X10 modules connected to your heaters or boiler. These X10 modules can be Din appliance modules (AD10) for boilers working on 230V or Universal modules (UM7206) for boilers working on low voltage (up to 24V).

Each thermostat transmits the comfort setpoint and the ambient temperature. In the Maxi Controller you can enter a temperature setback , between 1 and 9 degrees.

When the Maxi Controller is in “Disarm” or “Arm home” mode, it will turn On or Off the X10 module connected to the boiler depending of the ambient temperature and the comfort setpoint.

When the console is in “Arm Away” mode, the setback differential to the comfort setpoint is applied. Suppose the ambient temperature is 15 °C, the comfort setpoint is 20°C, with a setback of 4°C : the comfort setpoint minus the setback is 20°C - 4°C= 16°C, so the console will send an On message.

Suppose that now the ambient temperature is 19°C, the comfort setpoint minus the setback is 20°C - 4°C= 16°C, so the console will send an OFF message.

b) Installation

1. Set the security console mode switch to the THERM position.
2. To install a thermostat with the console, press and hold its **+** and **-** keys together for 3 seconds. The DigiMax 210 will then transmit its unique digital code every 10 seconds for the next 5 minutes. The display will show flash ']]]' while this is happening.
3. After a few seconds you should hear a "bip" from the console and the first zone indicator should come on or, if you have already intalled thermostats with the console, the next available free zone will be indicated.
4. Go to the thermostat and press any key to stop the transmission. The display will stop flashing ']]]' and return to normal.
5. Repeat this procedure for thermostat 2, 3 and 4. The first thermostat will be installed on zone 1, the second will be installed on zone 2...., the fourth on zone 4.
6. On the security console, reset the mode switch to Run1 or Run2

Each thermostat will transmit a message every 5 minutes. If during 20 minutes, the console does not receive any signal from a thermostat, its RECORD LED will flash.

You can then put the slide switch to the THERM position to see which zone (thermostat) has a problem.

The Maxi Controller transmits an X10 message on the unit code of the zone allocated by the security console (see above) and on the house code of the console + 1.

i.e. : If the console is on Housecode A,
- thermostat on zone 1 will generate message on code B1,

- thermostat on zone 2 will generate message on code B2,
- thermostat on zone 3 will generate message on code B3,
- thermostat on zone 4 will generate message on code B4.

If the console is on Housecode B,
- thermostat on zone 1 will generate message on code C1, thermostat on zone 2 message on code C2 etc...

c) programming of the setback temperature

1. Set the security console mode switch to the INSTALL position.
2. Key in your PIN code (factory default 0000).
3. Press key number 9
4. Press ENTER
5. Key in the setback temperature between 1 to 9 in degree Celcius.
6. Press ENTER.
7. Reset the mode switch to Run1 or Run2

d) Telephone

When theMaxi Controller is “Arm Away”, it is possible using its dial-in function features, to apply or not the setback differential to the “comfort” setpoint:

To apply the temperature set back

1. Call the security console from a touch tone or mobile phone.
2. The console will answer your call with 3 short beeps.
3. After these beeps, enter your PIN code via the phone (factory default 0000).
4. The console confirms a correct PIN code with 3 short beeps (an erratic PIN code is indicated by one long beep).

5. Dial via the phone “99#”, you will hear 3 short confirmation beeps.
6. The setback differential is now applied to the comfort setpoint.

Apply the comfort setting

1. Call the security console from a touch tone or mobile phone.
2. The security console will answer your call with 3 short beeps.
3. After these beeps, enter your PIN code via the phone (factory default 0000).
4. The console confirms a correct PIN code with 3 beeps (an erratic PIN code is indicated by one long beep).
5. Dial via the phone 99*, you will hear 3 short confirmation beeps.
6. The comfort setpoint is now applied.

e) To erase a registered thermostat

1. Set the security console mode switch to the THERM position. All indicators of occupied zones come on.
2. Key in your PIN code (factory default 0000).
3. Press key number 8
4. Press ENTER
5. Enter the required thermostat (1 to 4, e.g. press 3 for thermostat 3)
6. Press ENTER
7. Reset the mode switch to the RUN 1 or RUN 2: zone indicators go out.

f) Trouble shooting :

1. **Comfort temperature**
   If you do not manage to set a temperature level under 16 ° C, check that the thermostat has not been set in order to avoid a lower temperature level.
   Refer to the chapter 6 “configuring” of this user guide.

2. **Operating troubles**
   If the boiler does not work on the request of the security console, check the battery symbol on the DigiMax LCD. Change the batteries if necessary. If the display does not operates, it means that you probably missed the low battery symbol on the LCD : replace the batteries. If the batteries are taken off during more that 5 to 10 minutes, you may need to re-install the thermostat on the security console.

EC DECLARATION OF CONFORMITY

Assesment of compliance of the product with requirements relating to the essential requirements acc. to article 3 R&TTE was based on annexe IV of the Directive 1999/5/EC and the following standards : Radio: EN 300 220-1 : 1997; EMC : ETS 300 683 : 1997; Electrical Safety : EN60950: 2000

CE 0536!

Date: 05.06.2002

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